

Austin Energy FY2022 Q3 Operations Update

August 2022

Stuart Reilly

Acting Deputy General Manager & Chief Operating Officer



Agenda

Quarterly Operations Update



Executive Summary



Reliability Performance

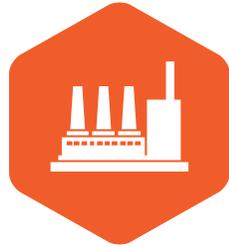


Environmental Performance



Grid Resilience Strategic Goal

Executive Summary



Generator availability on-target

For the quarter, resources mostly met availability targets, except where FPP outages were experienced.



Reliability performance stable

Performance over the longer term is trending statistically consistent with top quartile industry benchmarks.



Renewable production on-target

For the quarter, aggregate renewable production as a percentage of load at 61%.



Carbon free production on-target

For the month of April, 97% carbon-free generation as a percentage of load.



Austin Energy Operations Update

Reliability Performance



Generator Commercial Availability & Start Success

Commercial Availability

Generation Resource	Target Seasonal Commercial % Availability	Commercial Availability Actuals (%)	
		Q2 FY22 AVG	Q3 FY22 AVG
Decker Steam Units	95	98	-
Sand Hill Combined Cycle	95	55	100
Fayette Units	97	97	79
South Texas Project	100	100	100

Commercial Availability values reflect maintenance or refueling outages typical for this period

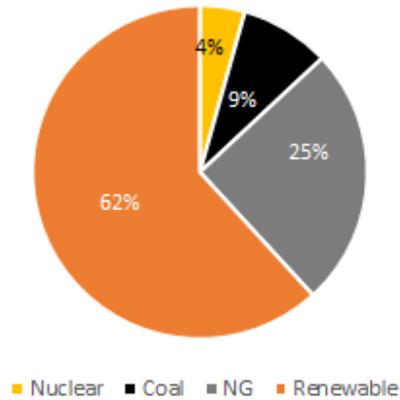
Start Success

	Start Success Target(%)	Start Success Actuals (%)	
		Q2 FY22 AVG	Q3 FY22 AVG
Simple Cycle Start Success	99	100	100



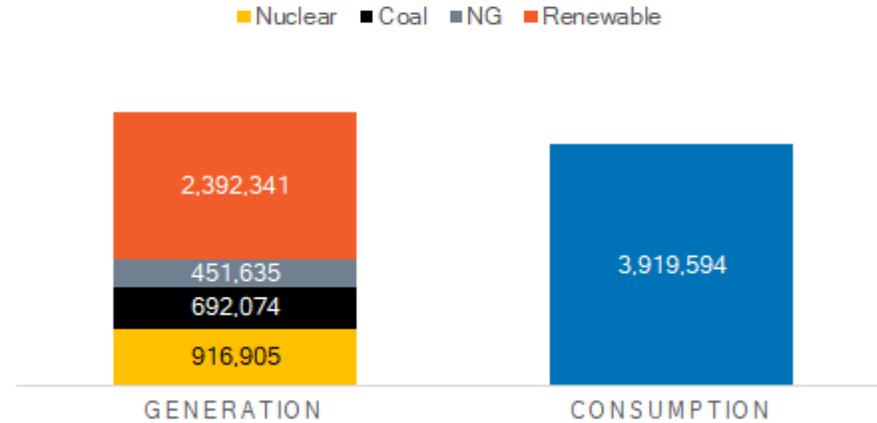
Net Generation and Load Analysis FY 2022 Q3

Power Generation Cost by Fuel Type

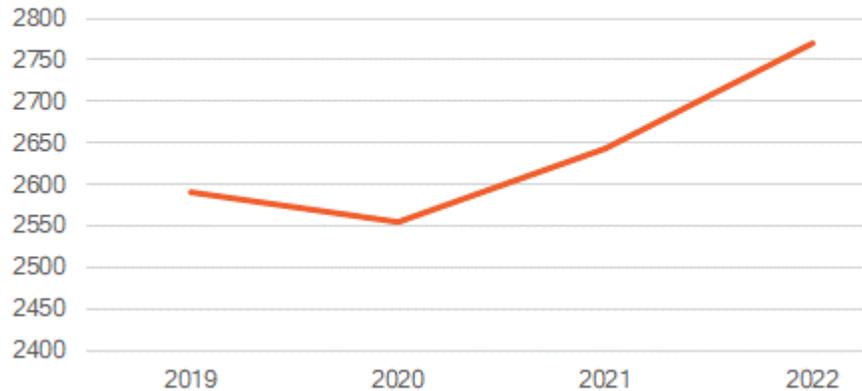


*Costs include fuel for generation, fuel transportation, renewable Power purchases agreements

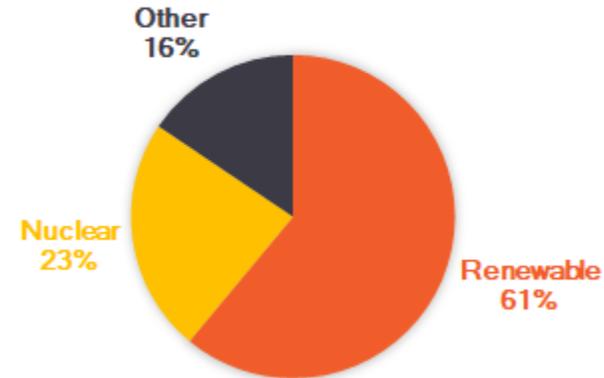
CONSUMPTION VS. GENERATION (MWH)



Historical FY22 Q3 System Peak Demand (MW)



POWER GENERATION AS PERCENT OF CONSUMPTION



System Reliability

CAIDI = Customer Average Interruption Duration Index

Average time to restore service

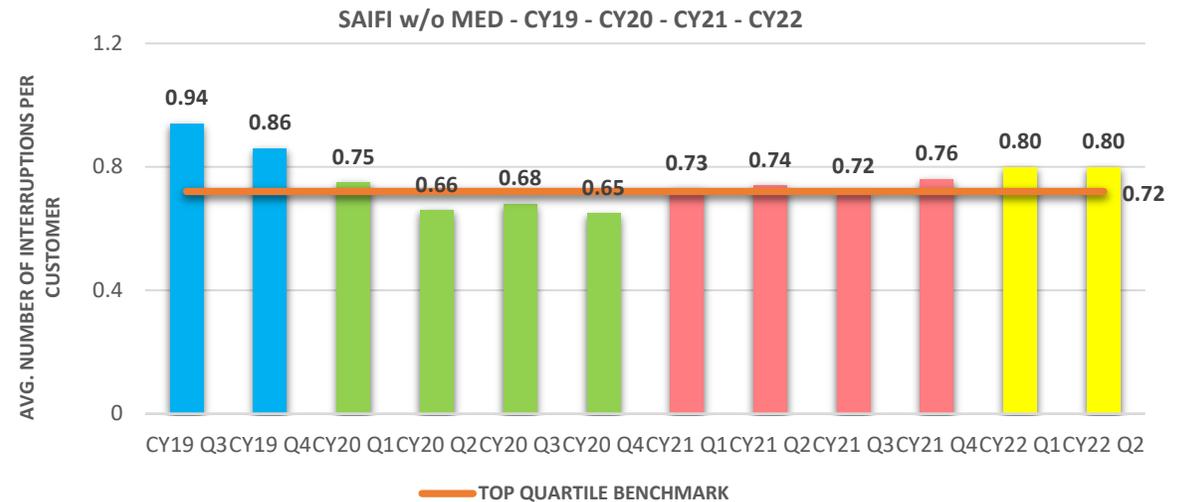
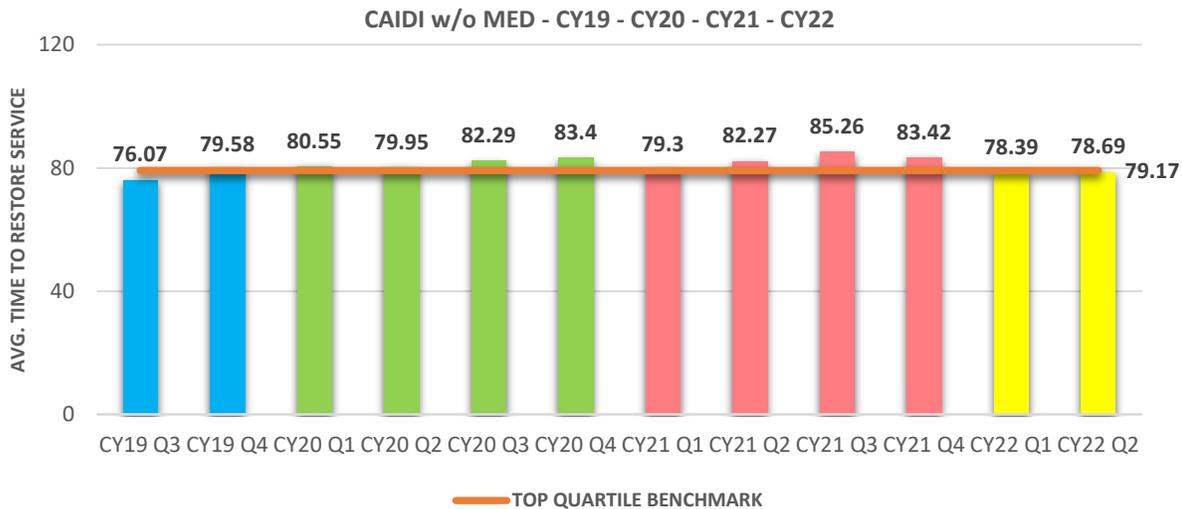
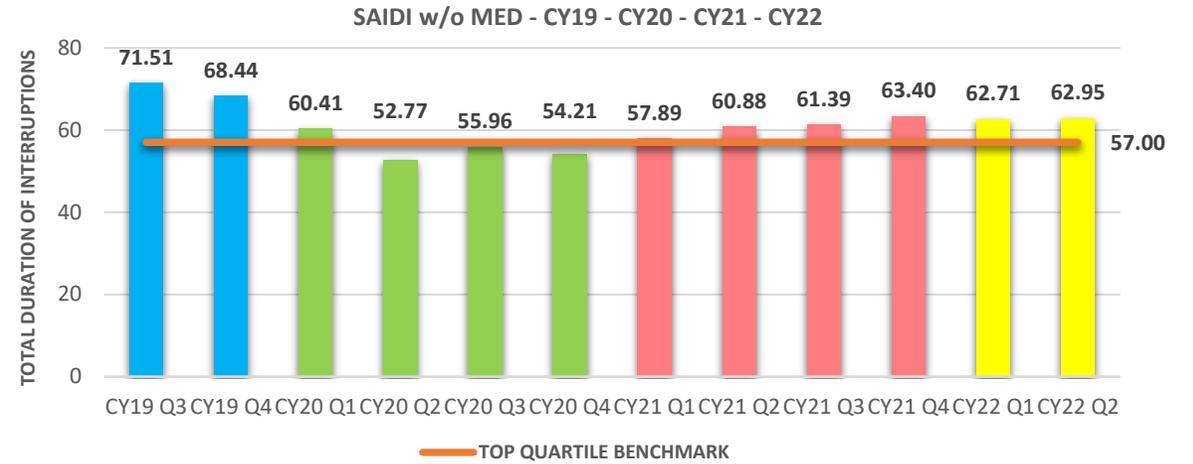
SAIDI = System Average Interruption Duration Index

Total duration of interruptions for the average customer, during a period of time

SAIFI = System Average Interruption Frequency Index

How often the average customer experiences a sustain interruption, over a period of time

MED = Major Event Days

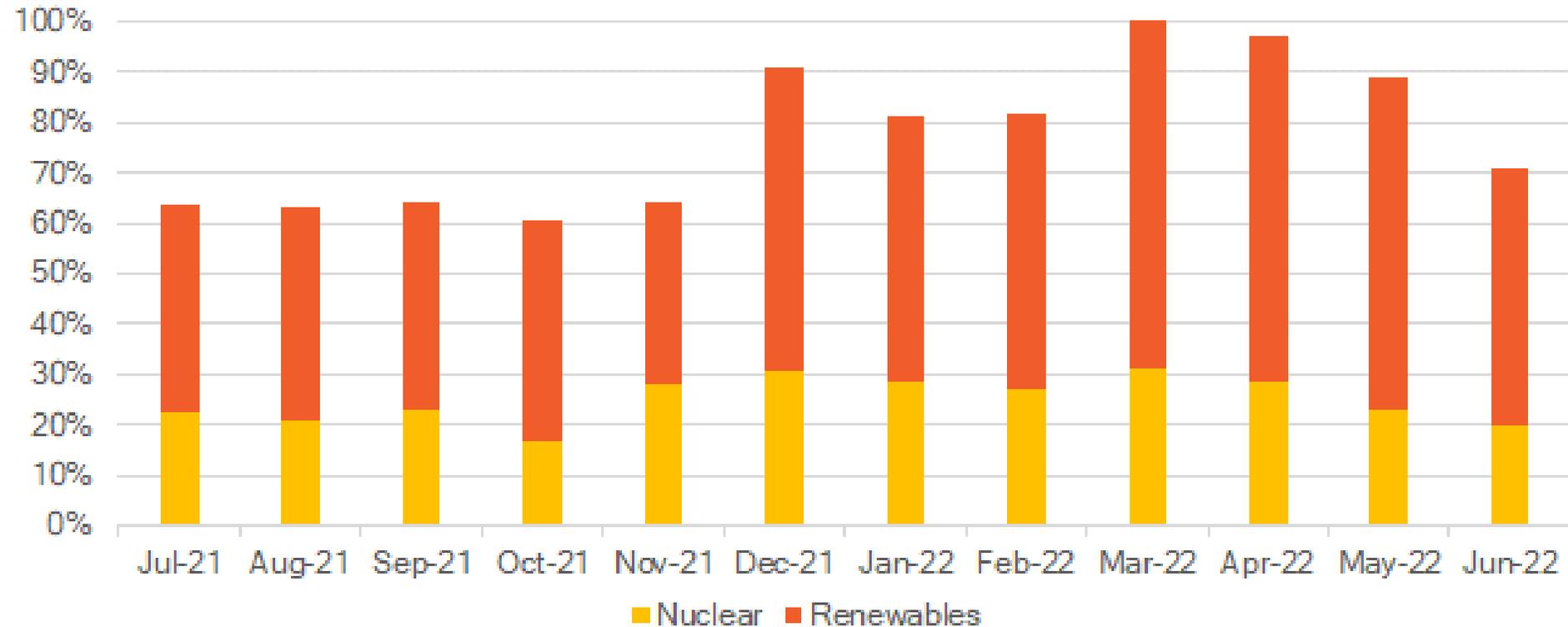


Austin Energy Operations Update

Environmental Performance



Carbon-Free Generation as a Percentage of Load



Environmental Focus

Aragorn Solar Project is now authorized to generate up to 187MW (previous limit set by PPA was 180MW) – thus 7MW increase in renewable portfolio



Austin Energy Operations Update

Grid Resilience Strategic Goal



Grid Resilience Initiatives

AE Strategic Goals 2020

Grid Resilience



Improve Distribution System Reliability

Identify, Rank, and Address feeder maintenance needs in areas historically beset by outages. Identify, Rank and Address system hardening needs in areas most susceptible to wildfire risk.

Phase I – Top 10 Feeders in both Performance and Wildfire Criticality addressed (CY/2022 - IN PROGRESS)

Phase II – Overall Distribution Resilience Program established, roll out (Q1/2022 – COMPLETE)



Improve Substation Reliability

Evaluate substation equipment operation and address legacy equipment needs.

Phase I – Fiskville Substation Upgrades (COMPLETE)

Phase II – Slow Breaker Operation – Rank and Schedule Substation Breakers for maintenance and remediation (COMPLETE)



Improve Underground Network Reliability

Starts with enabling greater Visibility to our downtown network through the integration of our network model into our Advanced Distribution Management System

Phase I – Network Modeled in ADMS – (Q3/2020) (COMPLETE)

Phase II – Network Primary Circuits Complete/Modeled in ADMS – (Q2/2021) (COMPLETE)

Phase III – Network Secondary Circuits Complete/Modeled in ADMS – (Q4/2023 IN PROGRESS)



Transmission System of the Future

As part of the 2030 generation plan, Austin Energy is commissioning a Transmission system study that will investigate ways to achieve our goals set forth in the plan while compensating for the loss of generation plants.

Phase I – Development of evaluation criteria (Q1/2021) (COMPLETE)

Phase II – Develop SOW for RFP release (Q2/2021) (COMPLETE)

Phase III – Transmission System Assessment (Q2/2023 IN PROGRESS)



Austin Energy Operations Update

Hot Weather Preparedness



ERCOT Energy Emergency Alert System

Conservation Alerts



ERCOT may ask consumers to reduce electric use when tight operating reserves are expected.



EEA 1

- Conservation Needed
- Operating reserves below 2,300 MW and not expected to recover w/in 30 mins

**Austin Energy
activates Incident
Command**

EEA 2

- Conservation Critical
- Operating reserves below 1,750 MW and not expected to recover w/in 30 mins

EEA 3

- Operating reserves below 1,000 MW and not expected to recover in 30 mins and/or frequency cannot be maintained
- ERCOT can mandate controlled outages*

***No controlled
outages have
occurred in 2022**

Conservation Appeals

ERCOT issued **conservation** notices for July 11 and 13, 2022

- Public appeals to reduce consumption
- No ERCOT directives for controlled outages
- Austin Energy called on customers to conserve energy

HELP THE ELECTRICAL GRID
Conserve electricity, especially during peak hours.

 Set thermostats to 78 degrees or higher.

 Avoid using large appliances (e.g., ovens, washer/dryer).

 Use fans to feel 4-6 degrees cooler.

 Businesses should minimize lighting and electrical equipment as much as possible.

 Set pool pumps to run early morning or overnight.

 Turn off and unplug non-essential lights and appliances.



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帮助电网
节约用电, 尤其在高峰时段。

AYUDA A LA RED ELÉCTRICA
Conserve electricidad, especialmente durante las horas pico.

 Ajuste los termostatos a 78 grados o más.

 Apague y desenchufe las luces y los electrodomésticos que no sean esenciales.

 Use ventiladores para sentirse entre 4 y 6 grados más frío.

 Evite el uso de electrodomésticos grandes (hornos, lavadoras y secadoras).

 Programe las bombas de la piscina para que funcionen por la mañana o por la noche.

 Los negocios deben minimizar la iluminación y los equipos eléctricos tanto como sea posible.



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مساعدة الشبكة الكهربائية
حافظ على الكهرباء وخاصة خلال ساعات الذروة.

GIÚP ĐỠ LƯỚI ĐIỆN
Tiết kiệm điện, đặc biệt là trong khoảng thời gian cao điểm.

 تجنب استخدام الأجهزة الكبيرة (مثل الأفران، الغسالة/المجفف).

 يجب على الشركات أن تقلل من الإضاءة وتشغيل المعدات الكهربائية قدر الإمكان.

 Tránh sử dụng các thiết bị gia dụng lớn (chẳng hạn như lò nướng, máy giặt/máy sấy).

 Các doanh nghiệp nên giảm thiểu sử dụng đèn và thiết bị điện ở mức tối đa có thể.





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Local Outages

Report Outage Check Status outagemap.austinenenergy.com

OVERVIEW HELP

Total Customers with Power: 99.99%
Active Outages 1
Total Affected Customers 15
Last Updated: Jul 31, 11:36 AM
Information updated every 10 minutes.

Summary Weather

Is your Power Out? Text OUT to 287846 (Austin).

KUBRA
Storm Center
Copyright © 2022 KUBRA
BROWSER SUPPORT?

Map Legend

View by Location

Customers Out:

- >1,000
- 101-1,000
- 11-100
- 1-10

Custom Layers

Service Area Boundary

Outage Information

Total Affected Customers 15

Start Time Jul 31, 2022, 8:12 AM

Estimated Restoration Crews need more time to restore power safely.

Crew Status One or more crews have been assigned.

Cause Planned outage. Maintenance scheduled today in your area may require an interruption in electric service. Safety of our crews and customers is our top priority.

ZOOM / MAGNIFY

Common Causes of Outages



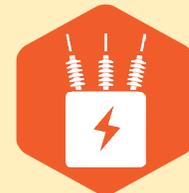
Car Crashes



Downed Trees



Animal Interference



Equipment Issues



Construction Incidents





**Customer Driven.
Community Focused.SM**

